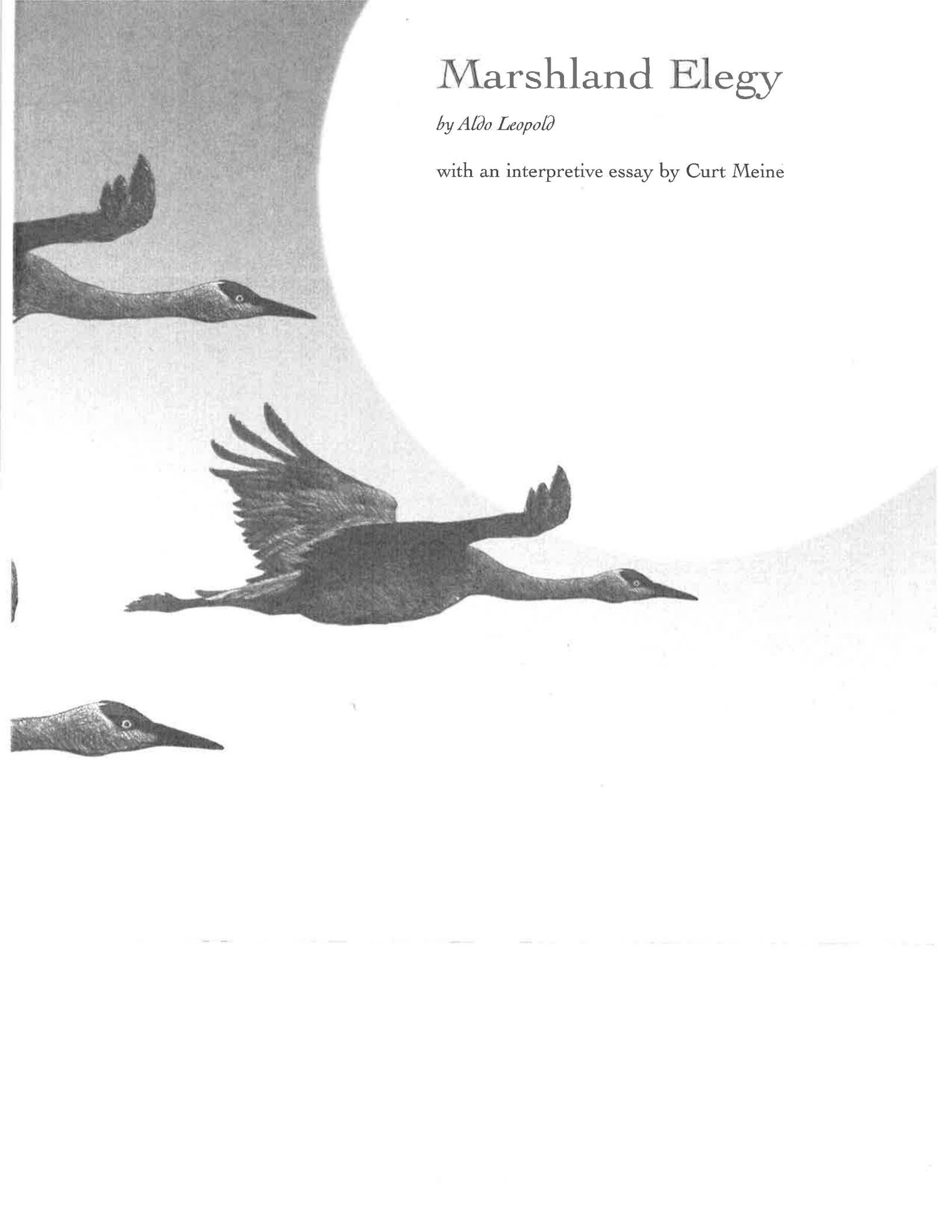


Marshland Elegy

by Aldo Leopold

with an interpretive essay by Curt Meine



Giving Voice to Concern: Aldo Leopold's "Marshland Elegy"

Curt Meine

Aldo Leopold's essay "Marshland Elegy" begins with an announcement: At dawn on "the great marsh," sandhill cranes emerge from a silent fog, their calls increasingly resonant over "the listening land." Early readers of the essay, and even Leopold himself, could not have fully realized that the essay itself *was* an announcement. Through it, a new voice proclaimed its arrival. That voice would help transform the way we write and think about the natural world.

When he wrote "Marshland Elegy" Leopold had not yet begun to envision the collection of essays that became *A Sand County Almanac*; one might say he was not yet the writer of *A Sand County Almanac*. Leopold, of course, was constantly writing. By October 1937, when "Marshland Elegy" appeared in the pages of *American Forests*, he had authored over two hundred publications: research papers and technical articles in the professional journals, policy reports, speeches, editorials, statements of conservation philosophy, and his landmark text

Game Management.¹ Always spare, balanced, and elegant in his prose, Leopold had long since earned a reputation as one of conservation's leading stylists.

But the language of "Marshland Elegy" was of another order, from another part of Leopold:

A dawn wind stirs on the great marsh. With almost imperceptible slowness it rolls a bank of fog across the wide morass. Like the white ghosts of a glacier the mists advance, riding over phalanxes of tamarack, sliding across bog-meadows heavy with dew. A single silence hangs from horizon to horizon.

This was not the language of science, or policy, or pedagogy, or philosophy, although strong undertones of these hummed in—and in between—the lines. This voice — like that of the crane itself — carried a poetic "certitude" (Leopold's word).

The lyric quality had long been present in Leopold's private writings—in the letters he had written since his youth, in his field journal entries, in unpublished fragments relegated to the "cooler" of his desk. One

could find it too in the sharp phrases with which he enlivened even his most dispassionate articles. Occasionally Leopold published a lighter piece of commentary or description. Earlier in 1937 *The Condor*, one of the leading ornithology journals and not one especially known for experimental prose, had published Leopold's "The Thick-Billed Parrot of Chihuahua." This celebration of the gaudy, raucous "numenon of the Sierra Madre" reflected the sense of natural vitality Leopold found, and drew upon, during his first important trip to the wildlands of northern Mexico.²

Emboldened it seems by this breakthrough essay, Leopold soon turned his pen toward the marshes of his home landscape and the similarly evocative cranes.



Opposite: Three sandhill cranes in winter. (Inset) Sandhill cranes in flight against an evening sky. Courtesy International Crane Foundation.



Kill of whooping cranes, circa 1905. Courtesy University of Wisconsin-Madison Department of Wildlife Ecology.

With “Marshland Elegy,” Leopold tapped more deeply into his creative sources and assumed the voice that in its full refinement would distinguish *A Sand County Almanac*. This voice emerges from the background of Leopold’s other writings as do the cranes from the glacial mists, “a far clear blast of hunting horns, out of the sky into the fog.”

“Marshland Elegy” may be read as a historical coincidence. Even as events in

Leopold’s life were shaping his new voice, the cranes were calling it forth. By the mid-1930s the sandhill crane had been extirpated from large portions of its former range in the United States after decades of indiscriminate hunting, wetland destruction, and conversion of its upland habitats to agriculture. Wisconsin’s sandhill cranes were almost gone; Leopold and his students estimated that only about fifty breeding birds remained in the state. At the same time, the

remnant population of whooping cranes was in continual decline and would soon reach its nadir of no more than fifteen known individuals. Even among committed conservationists, the ultimate extinction of the whooper was considered all but a foregone conclusion — this despite the Migratory Bird Treaty of 1916, which provided protection for both whoopers and sandhills.⁵

If Leopold’s emerging voice was solemn in this early expression, solemnity was appropriate to the circumstances of the cranes and their diminished habitats, especially against the contemporary background rumble of dust storms, economic depression, and international political upheaval. Leopold had heard in the calls of Chihuahua’s thick-billed parrot the “salty enthusiasm of high comedy”; he now heard, in the bugling of cranes, a song of lament and mourning.

Yet, through the essay itself, Leopold sought to rise from solemnity to celebration: not yet to memorialize the cranes (as he would later memorialize the grizzlies of Escudilla, the wolves of Arizona, and the passenger pigeons of the mid-continent), but to draw attention to a passing wonder.

*When we hear his call we hear no mere bird.
We hear the trumpet in the orchestra of evolution. He is the symbol of our untamable past, of that incredible sweep of millennia which underlies and conditions the daily affairs of birds and men.*

As the cranes stood at the edge of extinction, so Leopold stands in his essay at the very brink of despair, too knowledgeable as a conservationist to hold unrealistic hopes, too unwilling as an observer to let the cranes pass into oblivion unheralded. So he went into himself, and into his countryside, to a greater depth, finding a way to express simultaneously irony and awe.



Leopold wrote "Marshland Elegy" after several years of intensive interest in central Wisconsin's vast but damaged wetlands and the remnant population of sandhill cranes they harbored. He was in the midst of a critical period (roughly the latter half of the 1930s), during which his conservation thought achieved maturity. As he strove to integrate new insights from ecology with his understanding of history, philosophy, sociology, land-use policy, economics, and education, cranes posed a quite tangible conservation challenge; this challenge in turn required a broadening of his overall conservation philosophy. Through cranes Leopold was able to define more precisely, for himself and for conservation, a new vantage point.

Leopold's awareness of cranes can be traced to his boyhood days as a precocious amateur ornithologist in his hometown of Burlington, Iowa. By his early teens, Aldo's life list included more than two hundred

fifty species, but cranes were not among them. One of his earliest field notebooks includes the item "Saw Blue Crane alight in 15 ft. water." This was presumably a great blue heron, with which sandhill cranes are so often confused. Later, during an extended 1903 hunting trip with his father in the Yellowstone backcountry, Leopold listed "Sandhill Crane" as the last of the sixty-six species he observed. In his notes he also recorded a "Crane whitish, black tips on wings"; but after further deliberation he crossed out "crane," and wrote "pelican."⁴

Not until Leopold joined the U.S. Forest Service and went to work in the American Southwest did he again encounter cranes. In the summer of 1910 he observed sandhill cranes, "evidently breeding," at the White Mountain Apache Indian Reservation. The Rocky Mountain sandhill crane population, like that of the Great Lakes region, was in decline. Leopold noted cranes only infrequently during these years, even after moving to Albuquerque, upstream of the important wintering grounds at Bosque del Apache on the Rio Grande.



In the fall of 1917, Leopold began the detailed field journals that he maintained until the end of his life. In just the sixth entry, on September 30, Leopold recorded twelve cranes near Los Lunas. Such obser-

vations, however, were rare: two weeks later a lone bird at La Joya, several years later a flock of thirty-five "going south along edge of mesa" at La Constanacia.⁵ In notes he prepared in 1919 for Florence Merriam Bailey, who was then compiling *The Birds of New Mexico*, he stated that "a few flocks pass southward generally about Oct. 1."⁶

Leopold evidently yearned to see and record cranes. He next noted them in November 1922 during his canoe adventure through the Upper Colorado River delta with his brother Carl. In his journal Leopold reported seeing

... a huge 'chimney' of cranes wheeling high in the sky over the punta. When they got the glint of the sun they showed pure white and looked like a huge skyrocket bursting into white sparks. Gradually they worked east and when over us suddenly formed into a series of 'V's and started for El Doctor. Carl counted 130 when they were in this formation. They still showed white and looked like great draped strings of pearls against the blue. At no time did they utter a sound. I cannot see how Sandhill Cranes could show so white. Could they have been Whooping Cranes?

Highly unlikely. Two days later Carl again noted a large flock of the birds, "white with black wing tips." Leopold had, however, forgotten his boyhood ornithology lesson from Yellowstone: The birds were surely pelicans;

the only known whooping cranes were extremely rare and over 1,000 miles to the east. Like cranes, pelicans form "chimneys" by riding thermals. Even in Leopold's field sketch, the flight formations looked less like classic "V"s than the uneven lines more typical of pelicans.⁷

The most interesting aspect of this false encounter was in fact its strong hold on Leopold's imagination. His final bird list for the trip included both the sandhill and whooping crane—without the attendant question marks that he usually placed next to unconfirmed observations. Twenty years later, when he wrote about the trip in his essay "The Green Lagoons," he still bent against his own objectivity in identifying the birds as cranes. Countering his own original field notes—that "at no time did [the birds] utter a sound"—he would write that "a faint bugle note soon told us they were cranes." He did, however, partially correct his earlier error. "At the time," he admitted, "my ornithology was homemade, and I was pleased to think them whooping cranes because they were so white. Doubtless they were sandhill cranes, but it doesn't matter. What matters is that we were sharing our wilderness with the wildest of living fowl."⁸ Perhaps what mattered most of all was that Leopold, in his memory and in his imagination, so closely associated cranes with wildness that he could overlook the more plausible pelicans.

Leopold's next rendezvous with cranes was more material. By 1929, he had moved to Wisconsin, left the U.S. Forest Service, and gone to work on the "Game Survey of the North Central States," an ambitious and unprecedented one-man effort to ascertain, on a state-by-state basis, the condition of game populations and habitats throughout the region. To test the utility of his research methods, Leopold decided to conduct a survey in a state outside the region. This brought him in early 1929 to Mississippi, where he encountered what is still the rarest of all crane taxa, the Mississippi sandhill crane.

A fragment of what was once a more extensive population of resident southern sandhill cranes, the Mississippi subspecies occurs now, as then, at just one small site in the southeastern portion of the state. Leopold's 1929 survey report yielded the first published record of their numbers: "at least fifty birds, and possibly a hundred or more." He noted that these birds seemed to be in no immediate danger, but that "there has been no attempt at a refuge or other action to give them special protection." He urged that such action be taken "before rather than after some radical disturbance takes place." He added, "It hardly needs to be argued that their preservation is a matter of statewide, or even national, moment." This is one of the earliest expressions of concern in Leopold's writing for

the perpetuation of a specific non-game animal population.⁹

Later that same year, Leopold compiled his Wisconsin game survey report. Although Wisconsin's few surviving sandhill cranes, like Mississippi's, could not be considered game birds, Leopold nonetheless devoted special attention to them. According to sketchy reports, a few cranes still bred in Wisconsin's most remote marshes, where the species had managed to find refuge through the previous decades of market gunning, marsh dredging, and peat fires.

As in Mississippi, no special effort had been undertaken in Wisconsin to protect the cranes. Indeed, museum scientists were still seeking specimens, an activity Leopold deemed "unnecessary" and "bad public policy." "Scientists," he wrote, "ought to know better than anyone else that the Wisconsin birds are probably not interchangeable with the general migratory stock, and that their removal means the end of the bird in this state." He urged that "everything possible be done to avoid the extermination of the local stocks," including protection of their habitat, more active enforcement of state and federal game laws, and research into the species' habitat needs.¹⁰

Leopold's report included a map showing known occurrences of cranes. The marks on the map were few, and Leopold would add only a few more in the following



CARL R. SANS II

Dancing cranes. Courtesy International Crane Foundation.

years — confirmed records from Wood County and Green Lake County in 1929, Burnett County in 1930, Wood County in 1932, Jackson County and Marquette County in 1933.¹¹ Most of these sites lay in the marshy “sand counties” along the Wisconsin River in central Wisconsin.

At the time, Leopold’s attentions were focused on this region. Since the advent of European settlement, the forces of fire, dredge, plow, drought, wind, and weed had altered much of the area’s extensive wetland

acreage, leaving a legacy of land degradation, widespread tax evasion, and persistent poverty. In response to the region’s economic woes, several of the newly initiated New Deal programs sought to stimulate redevelopment in the area, including restoration of its damaged marshes.

Leopold became involved in these efforts as a technical advisor, and in 1934 prepared a special article on the situation titled “The Wisconsin River Marshes.” The article was a forerunner to “Marshland

Elegy,” describing the impacts of European settlement on the region and outlining the many perplexing management questions that wetland restoration entailed. Among these: “What can be done to build up the remnant of breeding sandhill cranes? No one knows what they eat, or what is the weak spot in their present environment.”¹²

There is no clear indication that Leopold himself saw cranes in Wisconsin until the spring of 1934. Leopold had just been appointed to the new chair of game management at the University of Wisconsin in Madison. One of his first students, Franklin Schmidt, reported that “Aldo Leopold, Wallace Grange, and myself saw a pair with their young” at Shiprock Marsh in Adams County.¹³

That summer, on July 16, Leopold and his brother Carl paused while returning from a fishing trip to investigate another report of breeding cranes at Endeavor Marsh, just north of Portage. The marsh was almost level with nearby Buffalo Lake, and so had managed to escape “the epidemic of ditch-digging and land-booming” that had consumed so many other Wisconsin wetlands.

Interviewing older farmers near the marsh, Leopold learned that the number of breeding pairs had been declining for decades, but that perhaps three pairs remained. One farmer directed Aldo and Carl to a known territory near an oak hummock in the marsh. “We

went over there, and were standing under the oaks, scanning the marsh with glasses, when with loud trumpeting the pair flushed from the edge of the woods not a gunshot away. It was a noble sight."¹⁴

With these sightings, Leopold's interest in the cranes and their wetland habitats began to increase markedly. Several times that fall of 1934 Leopold observed flocks of migrating sandhills while hunting at Pilot Knob Marsh in Adams County. Through his local birding club in Madison, he organized a special evening seminar on sandhill cranes. He put several of his students to work on cranes in the field and library. One, Franklin Henika, reported on the Great Lakes sandhill crane population at the first North American Wildlife Conference in 1936.¹⁵ That same year another student, Fred Hamerstrom, organized a "Central

Wisconsin Crane Study" to document more formally Wisconsin's crane populations, their life history, their habitats, and their conservation needs. The lack of such basic information, Hamerstrom later wrote, was "the chief reason for casual treatment of so rare a bird."¹⁶



Leopold filled his "Sandhill Crane" file with miscellaneous notes on cranes from his readings and from his many correspondents.¹⁷ His friend Herb Stoddard reported fifty

cranes seen at Endeavor Marsh. Seventy-five pairs observed on Malheur Lake in Oregon in 1936. Even a poem or two. Milton:

Part loosely wing the region; part more wise,

In common ranged in figure, wedge their way

Intelligent of seasons, and set forth

Their airy caravan, high over seas

Flying, and over lands; with mutual win.

Easing their flight; so steers the prudent crane.

As information on cranes began to flow into Leopold's files, two signal events further directed his attention to the cranes and their Wisconsin habitats. First, in April 1935 Leopold acquired his own small piece of worn-out sand county land along the Wisconsin River, just south of where he had seen cranes the summer before. He would henceforth have an even greater personal investment in the restoration of this region whose fate seemed so closely tied with that of the cranes.

Second, in the fall of 1935, Leopold traveled to Germany on a research fellowship, a trip that would have profound effects on Leopold's evolving conservation philosophy. He observed with concern the loss of biological diversity in the German fields and forests. He made special note of the decline, "through drainage and high-

Part loosely wing the region; part more wise,

In common ranged in figure, wedge their way

Intelligent of seasons, and set forth

Their airy caravan, high over seas Flying, and over lands; with mutual

wing easing their flight; so steers the prudent crane.

Milton

From one of Aldo Leopold's notebooks. Courtesy University of Wisconsin-Madison Archives.

breeding pairs of sandhills in the Okefenokee Swamp. George Bird, a colleague in the university's journalism department, assured Leopold that the resident Florida population was healthy. Lawrence Walkinshaw, a dentist from Michigan who would become his generation's premiere student of cranes, traded crane news with Leopold—field sightings, breeding site locations, museum records. A student report on breeding cranes in Nevada. Migrating

ways," of the habitat of Germany's breeding population of Eurasian cranes.¹⁸ Among the lessons Leopold brought home from this important trip was the need to devote much greater attention to the fate of threatened species. In 1936 Leopold published (also in *American Forests*) his first article exclusively devoted to this topic. "It admits of no doubt," he wrote, "that the immediate needs of threatened members of our flora and fauna must be defined now or not at all." Among the species of concern he listed was the sandhill crane.¹⁹

"Threatened Species" was itself a landmark essay for Leopold, and for conservation. It both signalled and exemplified the growth of the field of "game management" — which Leopold had defined just three years before as "the art of making land produce sustained annual crops of wild game for recreational use"²⁰ — to include a wider range of goals and a broader spectrum of "wildlife" species. This shift, marking the beginning of a more coherent approach to the conservation of what we now term "biodiversity," was for Leopold a critical step in his own professional, intellectual, and spiritual development.²¹ Here was an important source of Leopold's emerging voice; it carried, prominently, echoes of cranes.

Leopold apparently composed "Marshland Elegy" in the summer of 1937. To it he brought the full force of the data, wonder, and concern that had marked his interest in cranes and wetlands over the previous four years.

The essay contains five sections. In the three-paragraph descriptive opening, Leopold sets the scene and the tone, bringing dawn to the crane marsh through simple declarative sentences, building from silence to sound, from timelessness to the present. A more predictable essay might have then moved into straightforward natural history of the sandhill crane. Leopold, however, tells us that he has other goals for the essay when in his next two-paragraph section he enriches the previous scene, adding layer upon layer of evolutionary time and ecological complexity:

The cranes stand, as it were, upon the sodden pages of their own history. These peats are the compressed remains of the mosses that clogged the pools, of the tamaracks that spread over the mosses, of the cranes that bugled over the tamaracks since the retreat of the ice sheet. An endless caravan of generations has built of its own bones this bridge into the future, this habitat where the oncoming host again may live and breed and die.

After constructing this cross-section and multi-species view of crane habitat, Leopold

focuses on cranes within the context of deep evolutionary time, showing how our esthetic appreciation of natural objects and processes is not diminished, but enhanced, through scientific understanding. "Our ability to perceive quality in nature," he writes, "begins, as in art, with the pretty. It expands through successive stages of the beautiful to values as yet uncaptured by language." One of the principal achievements of *A Sand County Almanac* is this recasting of our notion of natural beauty, away from the conventionally "scenic" to the more subtle sense that comes with ecological and evolutionary awareness.²²

While Leopold had introduced this theme in previous writings, the point became explicit in "Marshland Elegy": "When we hear [the crane's] call, we hear no mere bird. We hear the trumpet in the orchestra of evolution." Leopold had just this revision of perception in mind in his later introduction to *Sand County*, where he expressed hope that we might better learn "to reap from [land] the esthetic harvest it is capable, under science, of contributing to culture."²³ Against the evolutionary backdrop, and with the special human ability to perceive and appreciate through the dimension of time, the silence of the crane-less marsh becomes all the more poignant.

In the remainder of this third section of the essay, Leopold turns to human his-



cliffs of ice, and fed by the torrents that fell from melting mountains. . . .

The lake rose through the centuries, finally spilling over east of the Baraboo range. There it cut a new channel for the river, and thus drained itself. To the residual lagoons came the cranes, bugling the defeat of the retreating winter, summoning the on-creeping host of living things to the collective task of marsh-building.

In such manner, Leopold animates the history throughout, making of the landscape not merely a stage but the play itself, in which all the players, human and non-human, interact and change.

There is room for criticism here. Leopold's history of the marshes omits completely key players in the history of the landscape—the region's native peoples. He posits an "Arcadian age," after European settlement and before the drainage mania, when "man and beast, plant and soil lived on and with each other in mutual toleration, to the mutual benefit of all"; even granting the Edenic illusion, this short interval was less an "age" than a brief moment.

Nonetheless, Leopold's panoramic account illustrates what set him apart from so many conservationists (and historians) of his day: his irrepressible need to understand the historical sequence through which conservation problems arose. This then suggests where to look for lasting solutions: to

the land itself, and the human demands placed upon it. Leopold's method of inquiry was rare in his day and remains a challenge to those who follow more conventional approaches to problem-solving. As he explains concisely in the essay, "To build a road is so much simpler than to think of what the country really needs."

Leopold closes "Marshland Elegy" with a brief and sobering paragraph. He leads "the last crane" away from us as he had led the cranes in through the glacial mists:

Some day, perhaps in the very process of our benefactions, perhaps in the fullness of geologic time, the last crane will trumpet his farewell and spiral skyward from the great marsh. High out of the clouds will fall the sound of hunting horns, the baying of the phantom pack, the tinkle of little bells, and then a silence never to be broken, unless perchance in some far pasture of the Milky Way.

The cranes' din, having risen with their approach, now fades with retreat. The "sadness" of the crane-less marsh now expands to the tragic possibility of a crane-less world—a place bereft of wonder and mystery, "adrift in history."



The special innovations of "Marshland Elegy"—its introduction of Leopold's

emerging literary style, its movement toward a more sophisticated conservation esthetic, its development of the ecological-evolutionary framework for conservation, its implied emphasis on the value of environmental history—would not be fully appreciated for years to come. At the time, however, Leopold's fine prose was sufficient to draw readers' raves. Owen Gromme, whose fascination with cranes equaled that of his friend Leopold, wrote to him, "Only a man who has worked with these noble birds can possibly grasp the full import and depth of your written words. There is *no sound on this earth* that stirs the primitive in me like the indescribable rattle of the Sandhill Crane. Well, I guess that you understand. You said it all."²⁷

Leopold and his students continued to amass information on cranes. The small circle of crane informants—Leopold, Gromme, Walter Scott, Lawrence Walkinshaw, Franklin Henika, A.W. Schorger, Fred and Fran Hamerstrom—continued to trade information on the cranes of the Upper Midwest, building a base of scientific information that might lend support to the population's recovery. In the spring of 1940, Leopold kept a close eye on a pair that had taken to the marsh near the family's shack on the Wisconsin River. His journals recorded the pair's activities, and his own rising hopes:

April 15

Again heard cranes at daylight. . . . Gus [Leopold's German shorthair] put them out of Baxter's corn—2 beauties. They flew out low, rattling the marsh with protest, and alighted in the brush marsh just west of Baxter's oak island. Could they possibly be going to nest?

April 16

Hear them at night and at intervals during the day. They are using the prairie below Barrows as well as across the river.

April 18

About 11 AM heard cranes and saw a pair—probably the same ones seen April 15—were circling the hay meadow. Think they were going to light but they saw us and passed on north up Lake Chapman.

April 28

Heard cranes call when Gus went hunting in Tom's marsh. Saw 1 bird fly out to the meadow where he mowed land in the sedge near the edge of the mowed land and the ditch. His being alone make us suspect a nest.

May 4-5

Explored Baxter's marsh to verify whether cranes still here. Again flushed a single bird on the north point of the timbered island. He (?) circled, alighted in same place, and then got nervous and crossed to brushy marsh

*east of island. I think there is now a nest and that the female is incubating.*²⁸

Leopold could not confirm the nest that year, nor any others in the years that followed. He and his family would, however, continue to see a few cranes during migration. ("They sound like a frog with a sore throat," he advised his daughter Nina). This lent hope that cranes would eventually return as a breeding species in the area.

Such hopes were fragile, but not unfounded. Critical wetland habitat was now being protected and restored in the Sandhill State Wildlife Area in Wood County, the Necedah National Wildlife Refuge in Juneau County, and other key areas in Wisconsin. With the reflooding of the sand county marshes, field research underway, and wardens now alert to the species' status, the basic conditions necessary for recovery were in place.

Faint anticipations of that recovery could be heard, at least in certain corners of the state. For example, the October 1941 issue of *The Passenger Pigeon*, the bulletin of Wisconsin's statewide ornithological society, contained a note on breeding cranes near New London in Waupaca County. "Under protection," the author surmised, "these fine stately birds are coming back."²⁹

A somewhat optimistic prognosis. Wisconsin's crane population would recover

only slowly, a process delayed when a further wave of wetland drainage came in following World War II. The crane population increased slowly through the 1940s, 1950s, and 1960s. Eventually, however, those birds that managed to hang on in the sand county marshes would form the core of a population that continues to expand, bringing their loud rattle back to marshes that had "once harbored cranes." Illinois reclaimed breeding cranes (one might say that the cranes reclaimed Illinois) in the late 1970s; eastern Minnesota followed in the mid-1980s, and northern Iowa in 1992.

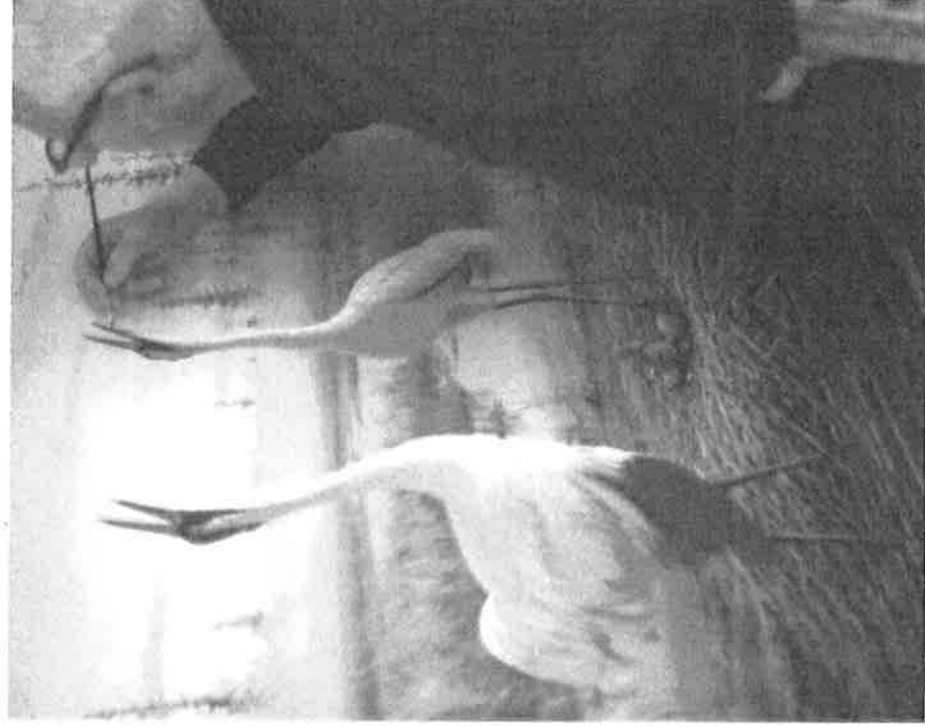
Meanwhile, "Marshland Elegy" had its own continuing impact. Encouraged by the essay's reception, Leopold soon began to write more in this lyrical vein. In 1939, he published the first in a series of popular natural history sketches for the widely distributed *Wisconsin Agriculturalist and Farmer*. More developed essays soon began to appear in national conservation publications—"Conservation Esthetic" (1938) in *Bird-Lore*, "Song of the Gavilan" (1940) in the *Journal of Wildlife Management*, "Escudilla" (1940) in *American Forests*, "Cheat Takes Over" (1941) in *The Land*. These essays formed the nucleus for the collection that would become *A Sand County Almanac*. In its earliest incarnation, however, the collection of essays went under a different title: "Marshland Elegy—And Other Essays."³⁰

Leopold died fighting a grass fire near his family's shack in the spring of 1948, a week after the manuscript of his essay collection was accepted for publication. In the aftermath of the tragedy, many of Leopold's friends, colleagues, and students offered their own elegies for "The Professor." Perhaps the most poignant of these came from Leopold's student Albert Hochbaum, writing from the marshes of Manitoba:

Yesterday, as on all days since he touched our lives, we had some reason to think of Aldo Leopold, once or a dozen times. In my own case, I saw a small flock of Sandhill Cranes in Brown's Slough about noon, the first I had ever seen there; and at once there came to mind the time at the shack when he showed me my first cranes, and the half-dozen times since when we had seen cranes together. Yesterday, Aldo left our world.³¹

The Chinese poet Tu Fu composed the poem "Clear Evening After Rain" in the eighth century:

The sun sinks toward the horizon.
The light clouds are blown away.
A rainbow shines on the river.
The last raindrops spatter the rocks.
Cranes and herons soar in the sky.
Fat bears feed along the banks.



Owen Gromme at work on Salure to the Dawn. Courtesy International Crane Foundation.

I wait here for the west wind
And enjoy the crescent moon
Shining through misty bamboo.³²

We read such verse with an odd sense of commingled serenity and remorse. The words are of the moment; their peacefulness endures all time, soothes and clarifies like the rain-shower itself of twelve centuries

ago. Regret comes with the realization that the poet's own sense of certainty is increasingly foreign to us. It belongs to another time. The experience of cranes, and soaring herons, and feeding bears, even bamboo—of the wild itself—as a normal and expected part of our world can no longer be so casually assumed. It was not so even in Leopold's day. The observant poet can no longer simply evoke, or celebrate, or allude to wild places and their wild inhabitants. The world has experienced too much loss, and the poet knows too much.

Leopold in 1937 might have wanted only to describe or celebrate the crane, but in good conscience he had also to lament. He wrote his elegy at a time when it seemed as if cranes could not be assured safe passage into the future—and so they cannot. Of the world's fifteen crane species, eleven are now considered threatened, and the conservation challenges they face are sobering.³³ Yet, even as Leopold was composing "Marshland Elegy," casual assumptions about the persistence and disappearance of cranes and of biological diversity in general were first being seriously questioned. Leopold's writing has since contributed significantly to this change in attitudes and the

growing concern over our losses. In this sense, the cranes, and the voice that Leopold assumed in telling their story, helped to redefine the very task of conservation.

The last cranes have not yet retreated to "some far pasture of the Milky Way." The wild population of whooping cranes has recovered slowly, and stands (as of 1999) at about one hundred eighty. Wisconsin's sandhill cranes number over ten thousand, enough to make them a more common thrill (and an occasional threat to sprouting corn and buried potatoes).

In other parts of the world, the prospects for cranes are mixed. Two of the Siberian crane's three populations hover at the edge of extinction. The rare crane species of East Asia—the Siberian, white-naped, hooded, and red-crowned—face an array of

threats, from wetland conversion to large dams to urban encroachment. Sarus cranes, the world's tallest flying birds, are under pressure from expanding human populations in Southeast Asia and India. In Africa, once abundant populations of blue cranes and crowned cranes have declined in recent years.

But if there is continuity in the threats to cranes, there is also continuity in the conservation response. Not far from the Leopold property at the southern edge of Wisconsin's sand counties, the International Crane Foundation has made its home since 1973. It serves as the nerve center of a global network of scientists and others dedicated to the conservation of cranes and their habitats. Today researchers and volunteers at the International Crane Foundation work in Wisconsin marshes that were devoid of cranes just a few decades ago. Elsewhere in

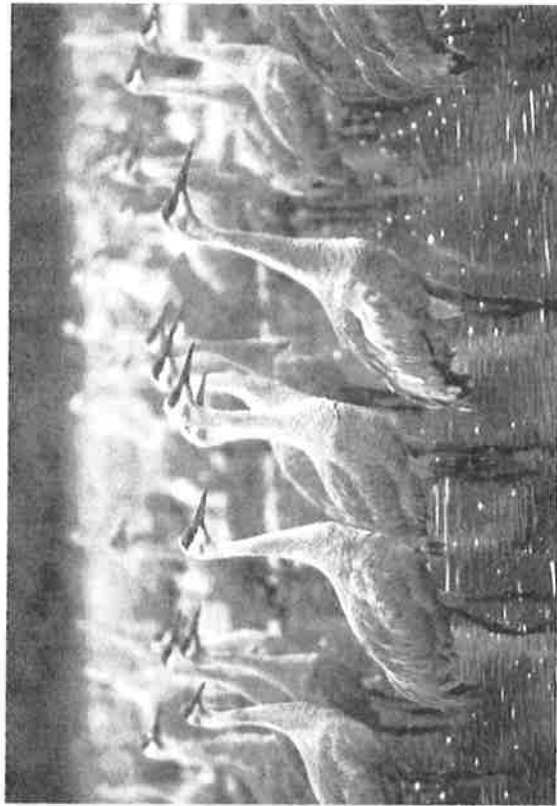
the world, they work with local conservationists to ensure that their wetlands remain wild with cranes.

Leopold's "Marshland Elegy" has proven, so far at least, not to induce acquiescence but to inspire transformation. Its warning has helped to stimulate its own corrective. However, there is no assurance that the cranes will be able to soar above and beyond the current high wave of human impacts. In his own day, the best Leopold could do at the end of his essay was to sound an ambiguous note—of history ending "in paradox" and the cranes "some day, perhaps" trumpeting their last farewell. Leopold at least left open the possibility that the day again may come when the sight of a crane, soaring in a clear sky after rain, may be easily expected, when elegies can be reserved for another, later geologic era. ~~—~~

Notes

1. "Marshland Elegy" was originally published in *American Forests* 43,10 (October 1957), 472-474. For a complete bibliography of Leopold's publications, see J. Baird Callicott and Susan Flader, eds., *The River of the Mother of God and Other Essays by Aldo Leopold* (Madison: University of Wisconsin Press, 1991), 349-370. The development of the manuscript of *A Sand County Almanac* is concisely reviewed in Dennis Ribbens, "The Making of *A Sand County Almanac*," pp. 91-109 in J. Baird Callicott, ed., *Companion to A Sand County Almanac* (Madison: University of Wisconsin Press, 1987).
2. "The Thick Billed Parrot of Chihuahua" first appeared in *The Condor* 39,1 (January-February 1937), 9-10. Leopold included the essay in *A Sand County Almanac* under the title "Guacamaja."
3. For historical overviews of the status of sandhill and whooping crane populations, see Robert Porter Allen, *The Whooping Crane*, Research Report No. 3 (New York: National Audubon Society, 1952); Paul A. Johnsgard, *Cranes of the World* (Bloomington: Indiana University Press, 1983); Robin Doughty, *Return of the Whooping Crane* (Austin: University of Texas Press, 1989); Paul A. Johnsgard, *Crane Music: A Natural History of North American Cranes* (Washington, D. C.: Smithsonian Institution Press, 1991); U. S. Fish and Wildlife Service, *Whooping Crane Recovery Plan* (Albuquerque: USFWS, 1994); Curt

- Meine and George Archibald, compilers, *The Cranes: Status Survey and Conservation Action Plan* (Gland, Switzerland: IUCN, 1996).
4. Leopold's early ornithological notes are in the Aldo Leopold Papers (Series 10-7, Box 1) in the University of Wisconsin-Madison Archives.
5. Aldo Leopold, "New Mexico Journal," Leopold Papers, Series 10-7, Box 3.
6. Aldo Leopold, "Notes on New Mexico Birds," unpublished notes prepared for Florence Merriam Bailey, 1/17/19, Leopold Papers, Series 10-8, Box 8.
7. Aldo Leopold, "New Mexico Journal," Leopold Papers, Series 10-7, Box 3. The journal account of this trip was later published in the book *Round River: From the Journals of Aldo Leopold* (New York: Oxford University Press, 1953).
8. Aldo Leopold, *A Sand County Almanac and Sketches Here and There* (New York: Oxford Press, 1949), 148.
9. Aldo Leopold, "Report on a Game Survey of Mississippi," 40, 2/1/29, Leopold Papers, Series 10-6, Box 11.
10. Aldo Leopold, "Report on a Game Survey of Wisconsin," 132, 10/1/29, Leopold Papers, Series 10-6, Box 11.
11. See letter, Lawrence Walkinshaw to Walter Scott, 9/15/40, Ron Sauey Memorial Library for Bird Conservation, International Crane Foundation.
12. Aldo Leopold, "The Wisconsin River Marshes," *National Waltonian* 2,3 (September 1934), 60.
13. Schmidt's observations were related in later correspondence between Wallace Grange and Lawrence Walkinshaw (see n. 11 above).
14. Aldo Leopold, "Sandhill Cranes in the Endeavor Marsh," 7/20/34, Leopold Paper, Series 10-3, Box 2. See Curt Meine, "Aldo Leopold and the Endeavor Marsh," *The ICF Bugle* 21,4 (November 1995), 2, 4.
15. Franklin S. Henika, "Sand-hill Cranes in Wisconsin and Other Lake States," *Proceedings of the North American Wildlife Conference* (Washington, D. C.: Government Printing Office, 1936), 644-646. Henika's published report contained the first (and oft-cited since) estimate that "The total sand-hill crane population of Wisconsin is therefore estimated at about 25 breeding pairs." Henika concluded with the statement that "Sand-hill cranes in the Lake States are so rare that no effort should be spared to insure their preservation and increase."
16. Fred Hamerstrom, "Central Wisconsin Crane Study," *Wilson Bulletin* 50, 3 (September 1938), 175.
17. The sandhill crane file is in the Leopold Papers, Series 10-4, Box 4.
18. Aldo Leopold, "Naturschutz in Germany," *Bird-Lore* 38 (March-April, 1936), 104. For additional discussion of



Sandhill cranes on the Platte River. Courtesy International Crane Foundation.

extinct Birds and Animals," *American Forests* 42,3 (March 1936), 116-119. Oddy Leopold, did not list the whooping crane — further indication perhaps that the species had already been "written off." Leopold's focus on threatened species in this article coincides with an important session on "The Problem of Vanishing Species" at the March 1936 North American Wildlife Conference (see n. 15 above). Henika's paper on the Lake States' sandhill cranes was delivered at this session.

realize. Civilization is not, as they often assume, the enslavement of a stable and constant earth. It is a state of mutual and interdependent cooperation between human animals, other animals, plants, and soil, which may be disrupted at any moment by the failure of any of them." Aldo Leopold, "The Conservation Ethic," *Journal of Forestry* 31,6 (October 1933), 635.

20. Aldo Leopold, *Game Management* (New York: Charles Scribner's Sons, 1933), 3.
21. Curt Meine, "Keeper of the Cogs," *Defenders* 67,6 (November/December 1992), 9-17.
22. J. Baird Callicott explores this theme in his essay "Leopold's Land Aesthetic," in *In Defense of the Land Ethic: Essays in Environmental Philosophy* (Albany: State University of New York Press, 1989), 239-247.
23. Leopold, *A Sand County Almanac*, viii.
24. Bengt Berg, *To Africa With the Migratory Birds* (New York and London: G. P. Putnam's Sons, 1930), 134.
25. Even Leopold's early writings are replete with examples. Leopold provided a significant summary of this perspective in his 1933 article "The Conservation Ethic": "A harmonious relation to land is more intricate, and of more consequence to civilization, than the historians of its progress seem to
26. Leopold, "The Wisconsin River Marshes," 4.
27. Owen Gromme to Aldo Leopold, 12/21/37, Leopold Papers, Series 10-4, Box 4.
28. Aldo Leopold, "Wisconsin Journal," Leopold Papers, Series 10-7, Box 2.
29. Francis S. Dayton, "Sandhill Cranes Breed at New London," *The Passenger Pigeon* 3,10 (October 1941), 91.
30. Curt Meine, *Aldo Leopold: His Life and Work* (Madison: University of Wisconsin Press, 1988), 460.
31. H. Albert Hochbaum, untitled, 22 April 1948, Leopold Papers, Box 10-8, 3.
32. Kenneth Rexroth, *One Hundred Poems from the Chinese* (New York: New Directions Books, 1959), 31.
33. Meine and Archibald, *The Crane: Status Survey and Conservation Action Plan* (Gland, Switzerland: World Conservation Union, 1996).
19. Aldo Leopold, "Threatened Species: A Proposal to the Wildlife Conference for an Inventory of the Needs of Near-

Leopold's 1935 trip to Germany, see Susan Flader, *Thinking Like a Mountain: Aldo Leopold and the Evolution of an Ecological Attitude toward Deer, Wolves, and Forest* (Columbia: University of Missouri Press, 1974; reprint University of Wisconsin Press, 1994), 139-14; Michael L. Wolfe and Friedrich-Christian v. Berg, "Deer and Forestry in Germany: Half a Century After Aldo Leopold," *Journal of Forestry* 86,5 (May 1988), 25-31; Curt Meine, *Aldo Leopold: His Life and Work* (Madison: University of Wisconsin Press, 1988), 351-360.